

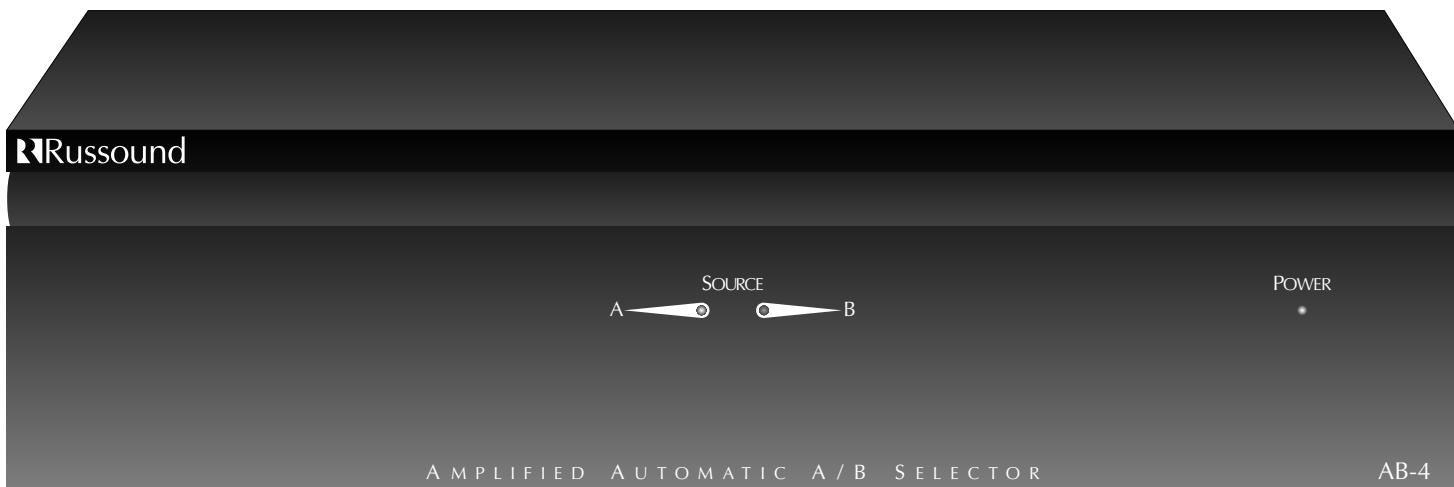


AB-4

Instruction Manual



Amplified Automatic A / B Selector



1. Safety Instructions



"WARNING" " TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

"CAUTION" " TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Safety Instructions

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to.
4. Follow Instructions - All operating and user instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.
7. Wall or ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
12. Power - Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, receptacles, and the point where they exit from the appliance.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally; or
 - E. The appliance has been dropped or the enclosure is damaged.
17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions

1. Do Not Touch The AB-4 With Wet Hands Do not handle the CA6.4 or power cord when your hands are wet or damp. If water or any other liquid enters the AB-4 cabinet, take the AB-4 to qualified service personal for inspection.
2. Location of AB-4 Place the AB-4 in a Well-Ventilated Location. Take special care to provide plenty of ventilation on all sides of the AB-4 especially when it is placed in an audio rack. If ventilation is blocked the AB-4 may overheat and malfunction. Do not expose the AB-4 to direct sun light or heating units as the AB-4 internal components temperature may rise and shorten the life of the components. Avoid damp and dusty places .
3. Care - From time to time you should wipe off the front and side panels and the cabinet with a soft cloth. Do not use rough material , thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel lettering.

Contents

1. Safety Instructions.	2
2. Introduction	3
3. Features.	3
4. Explaining The Indicators	3
4.1 Source Indicator.	3
4.2 Power.	3
4.3 Connections.	4
4.4 Default Input	4
4.5 Amplified Output	4
4.6 Line Audio Sensing Input	4
4.7 Video Sensing Input	4
4.8 Trigger Out.	4
5. Explaining The Controls.	5
5.1 Volume	5
5.2 Sensitivity	5
5.3 Delay	5
6. Specifications	6
7. Limited Warranty	6

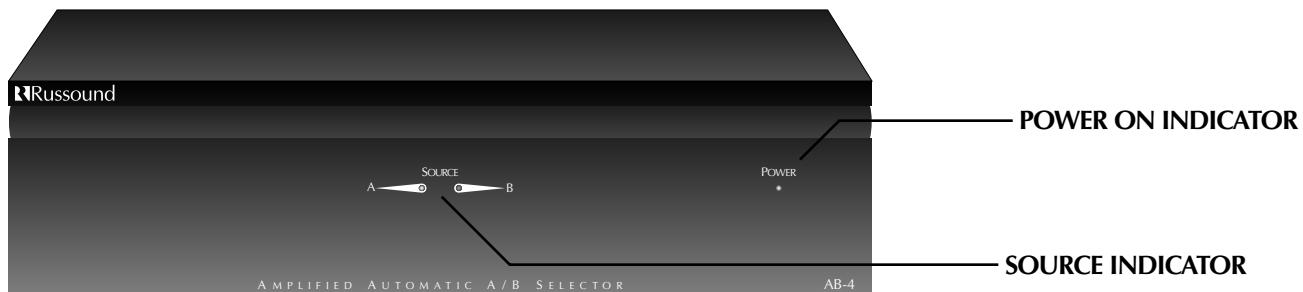
2. Introduction

Thank you for purchasing the Russound AB-4 Amplified Automatic A/B Selector. By following instructions this product will perform as it was designed. It is our mission to provide the highest quality product; for years of enjoyment.

The AB-4 is most commonly used in applications where a local source, such as a TV, needs amplification to share the local audio distribution speakers. Although many televisions do not have amplified speaker outputs, many do have variable line audio outputs that connect to an amplifier. The AB-4 is ideally used for this application. The AB-4 will sense the signal from the television's line audio or video outputs. When the signal is detected, the AB-4 will automatically switch out the whole-house audio and switch in the 56 watts per channel amplified output. This is done without interruption to the rest of the audio distribution system. The AB-4 is placed near the source being amplified and connected using standard line audio cables. The main audio distribution system and speakers are connected to the AB-4 using standard speaker wire. In the default mode of operation, the whole-house audio will play through to the speakers. The AB-4 has a SENS adjust which sets the trigger sensitivity for the incoming line audio signal, and a delay adjustment to prevent the AB-4 from switching back to the default input during low volume passages. The volume and balance are controlled by the independent left and right volume adjustments.

3. Features

The AB-4 shares the speakers with a local source and the whole-house audio system. The switching from the whole-house audio to the local source is automatically actuated by the audio or video sensing inputs. When the signal is sensed, the AB-4 engages the amplified outputs and the 12 volt triggered output. The 12 volt trigger can be used to activate a screen, close curtains or to simply trigger another device. The video input includes a loop-through connection, providing a continuous video path to other components. The amplified power output per channel is a constant 56 watts into an 8 ohm load and 62 watts into a 4 ohm load. The left and right audio amplifiers are attached to a large heat sink to allow the amplifiers to run at a high volume output for extended periods of time. The audio amplifier section includes independent thermal and short-circuit protection, allowing for years of reliable operation. The AB-4 is proudly manufactured in the USA at our facility in Newmarket, NH.



4. Explaining The Indicators

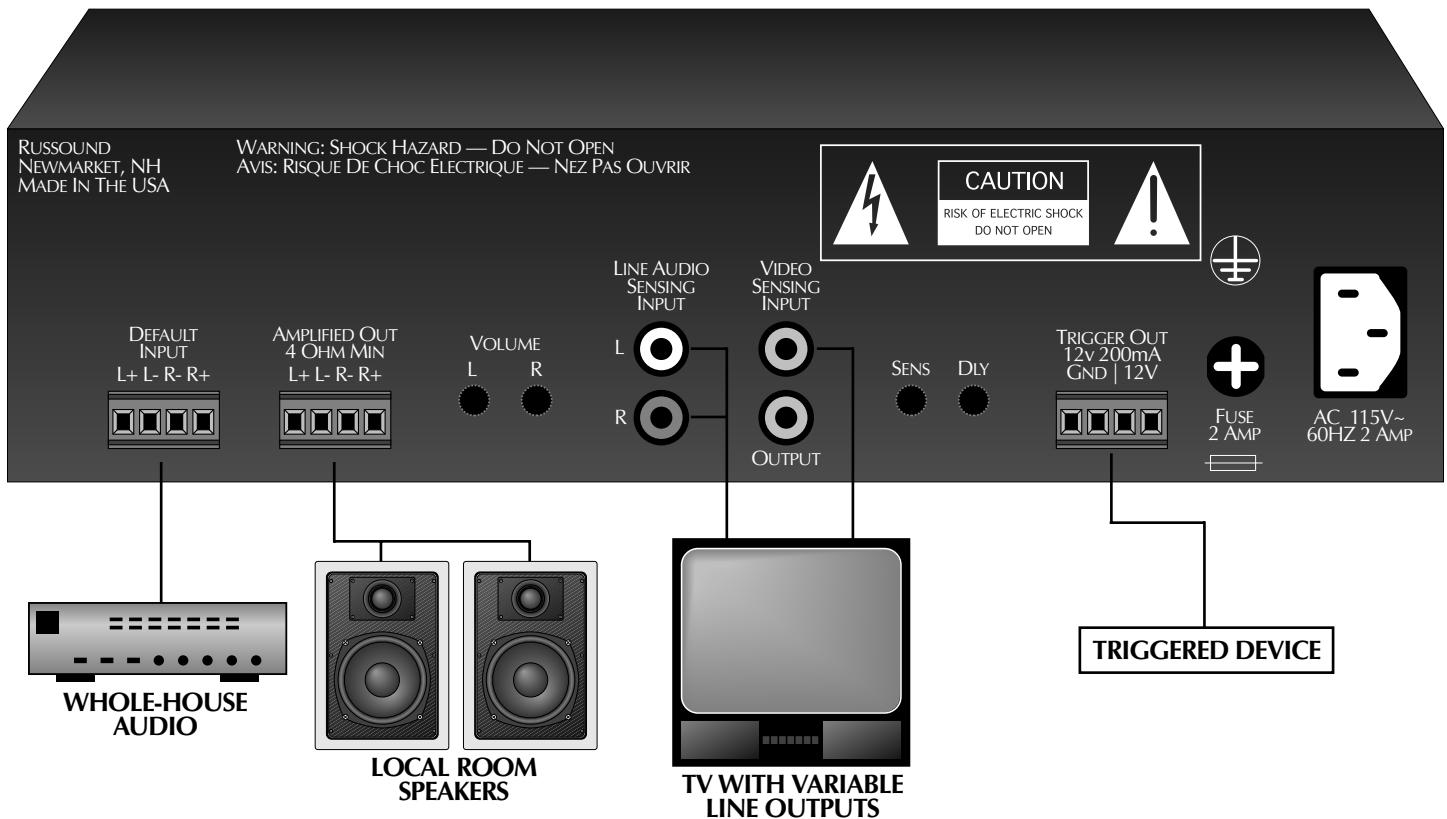
4.1 Source Indicator

Indicates the source that is switched to the speakers. Source A for the whole-house audio and source B for the local source.

4.2 Power

The indicator for power will be illuminated when the AC cord is plugged in. To shut off the unit, unplug the power cord.

4.3 Connections



4.4 Default Input

This input is from the whole-house audio distribution system. The whole-house audio will be heard from the local room speakers when the television or the local source is not on. This is a 4 wire speaker connection, L+ L- R- R+.

4.5 Amplified Output

The room speakers are connected to this output with two sets of two conductor speaker wire. One pair for left channel and one pair for right. The minimum speaker impedance is 4 ohms.

4.6 Line Audio Sensing Input

This input is from the variable line audio output of the local television. The audio is detected, and the AB-4 switches the speakers over to the built-in amplifiers. The audio from the TV is now amplified by the AB-4.

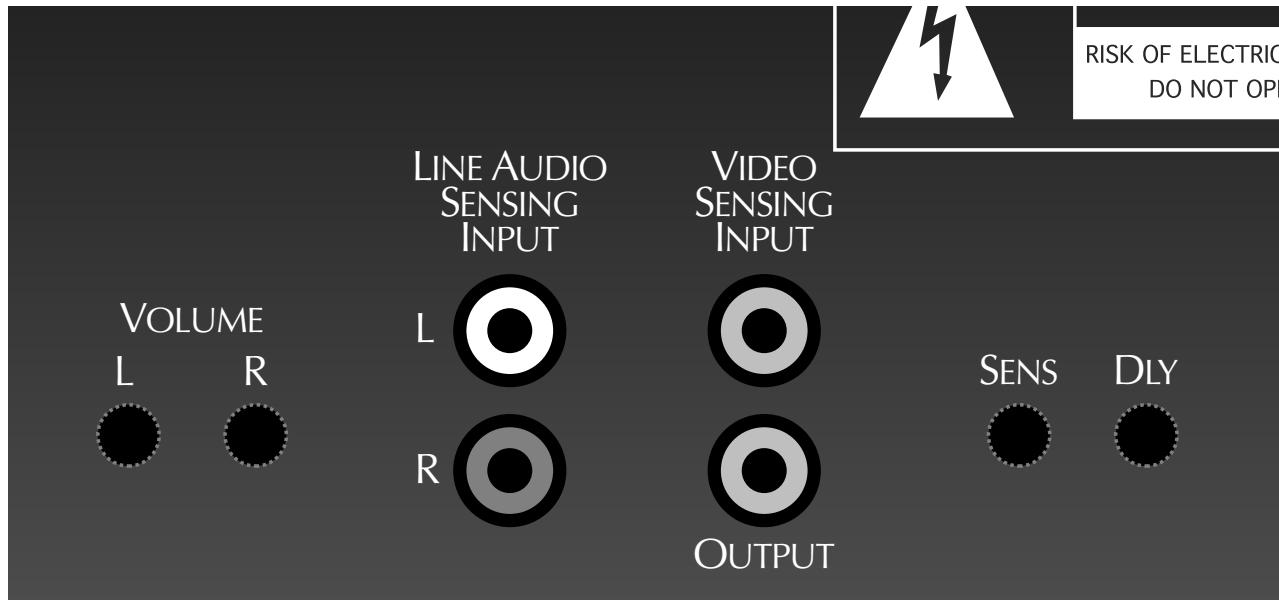
4.7 Video Sensing Input

The video input will detect the video signal and keep the AB-4 switched to the local source. In many instances there will be a picture on the screen of your TV when there is no audio. In this case, the video signal will keep the AB-4 selected to the TV. Located directly below the Video input is the Video output. This is used when the signal that is on the Video input needs to go to another source. This is a loop-through connection.

4.8 Trigger Out

The trigger output will switch to 12V DC when the AB-4 engages. This can be used to trigger a switched outlet or any other device that requires a 12V DC trigger voltage. In some cases, this could be used to drop a screen for a projection TV or to adjust the lighting in the room.

5. Explaining The Controls



5.1 Volume

The Volume controls adjust the left (L) and right (R) amplifier's audio outputs independently from each other. Adjust the volume levels until the sound is at the desired level.

5.2 Sensitivity

The Sens adjusts the level of audio signal required to activate the AB-4. Set the sensitivity control to approximately half way (12 o'clock). Turn on the whole-house audio and turn on the local audio source, monitoring the volume level. Lower the volume level of the local source to the minimum required to maintain the signal on the AB-4. Allow the audio to play for a minute to determine if the volume level is sufficient to maintain the AB-4 on the local source. Once you have made this determination, turn off the local source. The whole-house audio will switch in according to the delay you have set. To insure the appropriate sensitivity level, you may need to decrease or increase the sensitivity control. Remember, the sensitivity level should be set so that the proper audio level activates the AB-4 for the local source.

If the sensitivity is not properly adjusted, random switching from electrical noise may result.

5.3 Delay

To establish the proper delay, with both the local source and the whole-house audio distribution connected, turn on the whole-house audio, and the local source audio. Listen for the local source audio signal. Turn off the local source and listen for the whole-house audio to play after a period of time. Adjust the DLY clockwise to increase the delay or counter-clockwise to decrease. Repeat this until the desired delay is achieved.

6. Specifications

Minimum trigger sensitivity 15mV.

Delay 0 to 30 seconds.

Line Audio Inputs: Maximum input level 10 volts.

Input Impedance 10kΩ.

Audio Power Output (Speaker output):

62 WRMS /ch, @ 4 ohms (20Hz to 20KHz) with no more than .06% THD.

56 WRMS /ch, @ 8 ohms (20Hz to 20KHz) with no more than .06% THD.

Power Requirements (USA & Canada Only):

AC 120 Volts 60Hz 2 AMPS.

Dimensions: 11 3/4" W x 10" D x 3 5/16" H.

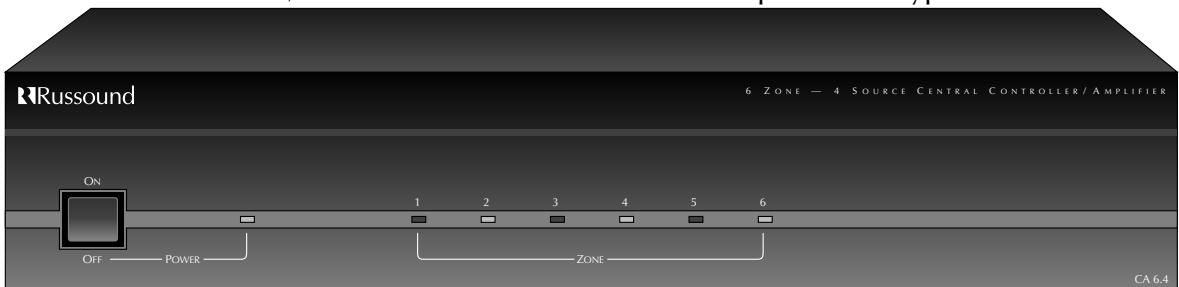
Weight: 7 lb.

7. LIMITED WARRANTY

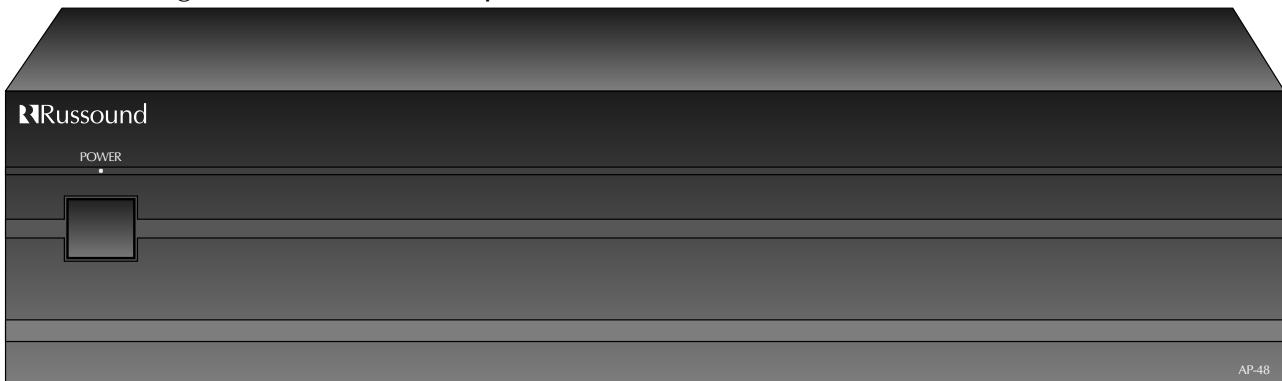
The Russound AB-4 is fully guaranteed for two (2) years from the date of purchase against all defects in materials and workmanship. During this period, Russound will replace any defective parts and correct any defect in workmanship without charge for either parts or labor. For this warranty to apply, the unit must be installed and used according to it's written instructions. If service is necessary, it must be performed by Russound. The unit must be returned to Russound at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects under the terms of the warranty. Russound assumes no responsibility for defects resulting from abuse or servicing performed by an agency or person not specifically authorized in writing by Russound. Damage to or destruction of components due to improper use voids the warranty. In these cases, the repair will be made at the owner's expense. To return for repairs, the unit must be shipped to Rus-sound at the owner's expense, along with a note explaining the nature of the service required. Be sure to pack in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

Other Russound Products

CA6.4 Six Zone, Four Source Central Controller / Amplifier w/ Keypad



AP-48 Eight Channel "Power Amplifier"



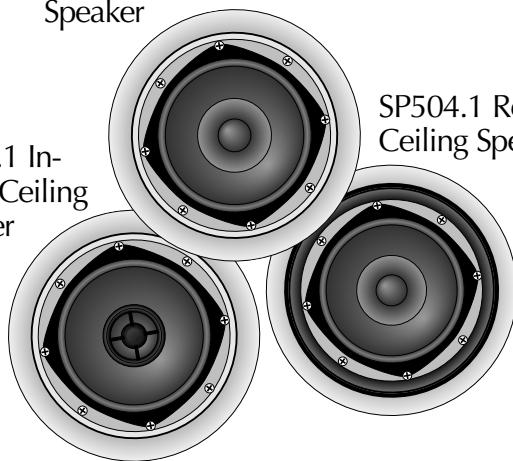
SP650.1 In-Wall Speaker



SP550.1 In-Wall Speaker

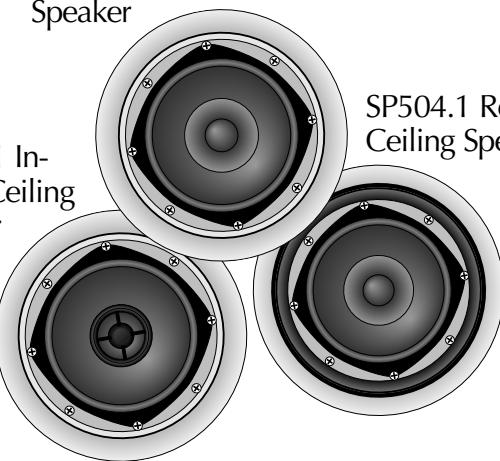


SP503.1 Ceiling Speaker

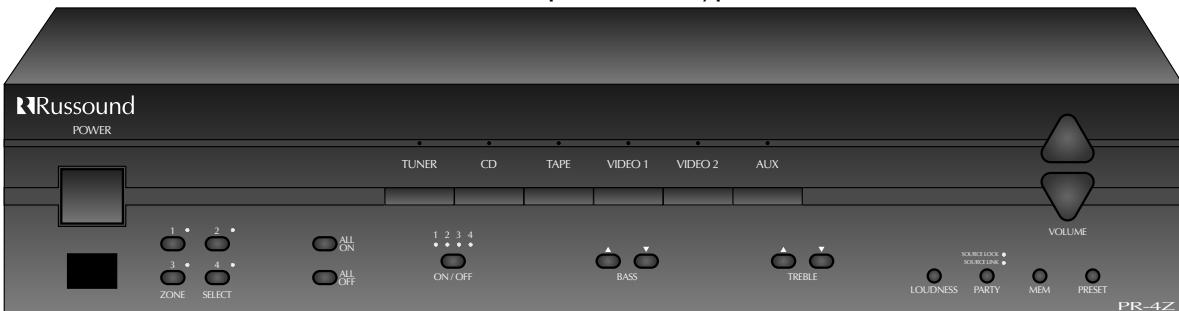


SP504.1 Recessed Ceiling Speaker

SP523.1 In-Wall / Ceiling Speaker



PR-4Z Four Zone Audio / Video Preamplifier w/ Keypad





A / V DISTRIBUTION & CONTROL SYSTEMS

5 Forbes Rd. Newmarket, NH 03857

• 603.659.5170 • Fax 603.659.5388

e-mail: tech@russound.com

the right
connection

Come visit us at:

www.russound.com